

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) ~~An asynchronous transfer mode (ATM)-based~~ A distributed virtual tandem switching system, comprising:

a centralized control and signaling interworking function (CS-IWF) device centrally serving a plurality of trunk inter-working function (T-IWF) devices, the CS-IWF device performing call control functions, providing a single connection between a narrowband signaling network and ~~an ATM~~ a packet switching network, and interfacing narrowband and broadband signaling for call processing and control within the ~~ATM~~ packet switching network so that telephone calls originating and terminating within a public switched telephone network are transmitted through the packet switching network.

2. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching system of claim 1, in which the narrowband signaling is SS7 signaling.

3. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching system of claim 1, in which the broadband signaling is PNNI.

4. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching system of claim 1, in which the broadband signaling is B-ISUP.

5. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching system of claim 1, in which the broadband signaling is UNI.

6. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching of claim 1, wherein the CS-IWF device dynamically facilitates setting up an individual switched virtual connection in the ~~ATM~~ packet switching network.

7. (Currently amended) A distributed virtual tandem switching method for transporting voice across a data ~~an asynchronous transfer mode (ATM)~~ network, the method comprising:

receiving narrowband signaling at a centralized control and signaling interworking function (CS-IWF) device;

converting between narrowband signaling and broadband signaling for call processing and control within the ~~ATM~~ data network; and

~~forwarded~~ the broadband signaling from the CS-IWF device to the ~~ATM~~ data network so that telephone calls originating and terminating within a public switched telephone network are transmitted through the data network.

8. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching method of claim 7, in which the narrowband signaling is SS7 signaling.

9. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching method of claim 7, in which the broadband signaling is PNNI.

10. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching method of claim 7, in which the broadband signaling is B-ISUP.

11. (Currently amended) The ~~ATM-based~~ distributed virtual tandem switching method of claim 7, in which the broadband signaling is UNI.

12. (Currently amended) The ~~ATM-based~~ distributed virtual tandem method of claim 7, further comprising dynamically setting up an individual switched virtual connection in the ~~ATM~~ packet switching network.

13. (Currently amended) A computer readable medium storing a program for transporting voice across ~~an asynchronous transfer mode (ATM)~~ a packet network, comprising:

a receiving source code segment that receives narrowband signaling at a centralized control and signaling interworking function (CS-IWF) device;

a converting source code segment that converts between narrowband signaling and broadband signaling for call processing and control within the ~~ATM~~ packet network; and

a forwarding source code segment that forwards the broadband signaling from the CS-IWF device to the ~~ATM~~ packet network so that telephone calls originating and terminating within a public switched telephone network are transmitted through the packet network.

14. (Original) The computer readable medium of claim 13, in which the narrowband signaling comprises SS7 signaling.

15. (Original) The computer readable medium of claim 13, in which the broadband signaling comprises PNNI.

16. (Original) The computer readable medium of claim 13, in which the broadband signaling comprises B-ISUP.

17. (Original) The computer readable medium of claim 13, in which the broadband signaling comprises UNI.

18. (Currently amended) The computer readable medium of claim 13, further comprising a switched virtual connection source code segment that dynamically sets up an individual switched virtual connection in the ~~ATM~~ switching packet network.

19. (Currently amended) ~~An asynchronous transfer mode (ATM)~~ A distributed virtual tandem switch including a first trunk inter-working function (T-IWF) device that converts trunks from end office switches to data packets ~~ATM~~ cells, and a second trunk inter-working function (T-IWF) device that converts data packets ~~ATM~~ cells to trunks for end office switches, comprising:

a centralized control and signaling inter-working function (CS-IWF) device that performs call control functions and converts between narrowband and broadband signaling for call processing and control within ~~an ATM~~ packet switching network;

wherein telephone calls originating and terminating within an advanced intelligent network are transmitted through the ~~ATM~~ packet switching network.

20. (Currently amended) The ATM distributed virtual tandem switch of claim 19, wherein individual switched virtual connections are provided that dynamically set up the ~~ATM~~ packet switching network.